

# **S 161**

## IS AN AUTOMATED MACHINE FOR HYDRODYNAMIC TREATMENT OF CONCRETE AND METAL SURFACES

## It has been developed for work in:

- building construction (repair of AB constructions pillars, plates, blockheads)
- civil engineering (roads, bridges, tunnels...)
- hydro technical infrastructure (pipelines, tunnels, dams, channels...)
- industry and shipbuilding (cleaning and anti corrosive protection)

SMALL IN SIZE, LOW WEIGHT, LOW ELECTRICAL ENERGY CONSUMPTION, SIMPLE TO OPERATE AND WORK WITH, HIGHLY MANEUVERABLE AND FLEXIBLE WITH A SOPHISTICATED AUTONOMOUS CONTROL SYSTEM ARE THE CHARACTERISTICS OF THIS ROBOT.

## These characteristics enable him to:

- work on a scaffolding or a hanging platform
- use stairs for driving to higher building floors
- pass through standard doors and openings on closed sites
- enter pipelines and tunnels
- get simple modifications for special jobs such us treatment of circular pillars, beams and other round objects
- accept different tools for cutting, drilling, painting...

The robot works in a combination with a high pressure water pump with input powers up to **360 kW** and operating pressure up to **3000 bar** using tools which enable him the following types of treatment:

- surface treatment of concrete and metal
- concrete hydrodemolition jobs
- removing debris and layers of material from different surfaces

## Treated surfaces can be:

- flat (floors, ceilings, walls, open and closed channels...)
- round or cylindrical (pipelines, tunnels...)





# 2 JET 061/062

## SURFACE TREATMENT OPTIONS:

## Possible minimums and maximums in treatment jobs:

#### CELLING





WALL





## The robot can treat flat surfaces under any angles in the relation to the standing surface.

Flat surfaces:

REATMENT OPTIONS:	190 - TJL S	2 JET - 062
FLOOR TREATMENT:		
height min. width min.	0,9 m 0,8 m	0,9 m 0,8 m
VALL IREAIMENT:	0.9 m	0.9 m
neight max.*	3,0 m	4,0 m
vidth min.	1,0 m	1,0 m
EILING TREATMENT:		
neight min.	0,9 m	0,9 m
neight max.*	3,0 m	4,0 m
vidth min.	0,8 m	0,8 m
TREATMENT		Contraction of the second
liameter min.	1,1 m	1,3 m
liameter max.*	3,0 m	4,0 m

\* with additional elements for stability reach can be increased by approx. 1 meter

FLOOR



## **CYLINDRICAL SURFACES**











# 7 JET 061/062

BASIC TECHNICAL SPECIFICATION:

TECHNICAL SPECIFICATIONS	190 - TJL S	2 JET - 062	N3 290 - TJC S	
POWER SUPPLY	three phase electrical power cord (16A) 10 kW		Petrol powered electrical generator - 10 kw	
CONTROL	remote console with 30m cable, WiFi communication, own power supply			
WIDTH HEIGHT LENGHT WEIGHT	680 mm 750 mm 1220 mm from 350 kg	750 mm 820 mm 1530 mm from 520 kg	750 mm 1410 mm 1550 mm from 750 kg	
RECOMMENDED PUMP INPUT POWER	< 300 kW	< 360 kW	< 360 kW	
DRIVING MECHANISM	separate drive with tracks (approx. 205 km/h)			
WORKING ON SLOPES	45°	45°	45°	



## Advanced guiding and control system:

The robot is controlled via a remote console with a cable or wireless WLAN connection option.

The robot is equipped an advanced control systems which enable him to follow wall, designated root or course including tool correction system which work together to guarantee unified surface treatment over large areas. This is especially important for surface treatment jobs.

The result of such an advanced system of control backed by the modular concept design id the ability that the R Jet – 06 series of robots can operate in closed and confined spaces without the presence of an operator, where human work would either be impossible or very hard and dangerous.

### **Additional equipment:**

The robots can be additionally equipped with a video camera system, which can be operated remotely from the console and where the recorded image can be seen on the screen.

For work on very steep slopes the robots can be equipped with a winch as a safety measure.

Also, there is a series of elements that can be used to prolong the tool column or to ensure stability to enable it for work in specific treatment positions.





